Kenmore®

Installation Instructions

Built-In Dishwasher

If you have questions, *call 1-800-4-MY-HOME ® (1-800-469-4663) or visit our website at:* ***www.sears.com***

BEFORE YOU BEGIN

Read these instructions completely and carefully.

IMPORTANT – Observe all governing codes and ordinances.

- **Note to Installer** – Be sure to leave these instructions for the consumer's and local inspector's use.
- **Note to Consumer** – Keep these instructions with your Owner's Manual for future reference.
- **Skill Level** – Installation of this dishwasher requires basic mechanical and electrical skills. **Proper installation is the responsibility of the installer. Product failure due to improper installation is not covered under the SEARS Appliance Warranty.**
- **Completion Time – 1 to 3 Hours.** New installations require more time than replacement installations.

IMPORTANT – The dishwasher MUST be installed to allow for future removal from the enclosure if service is required.

If you received a damaged dishwasher, you should immediately contact your dealer or builder.

Optional Accessories – See the Owner's Manual for available custom panel kits.

FOR YOUR SAFETY

Read and observe all CAUTIONS and WARNINGS shown throughout these instructions. While performing installations described in this booklet, gloves, safety glasses or goggles should be worn.

WARNING

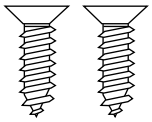
To reduce the risk of electrical shock, fire, or injury to persons, the installer must ensure that the dishwasher is completely enclosed at the time of installation.

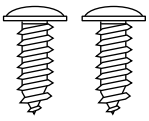
READ CAREFULLY.
KEEP THESE INSTRUCTIONS.

Installation Preparation

PARTS SUPPLIED:

- ☐ Two #8 Phillips flat head wood screws, 5/8" long to secure dishwasher to underside of countertop (in literature package).
- ☐ Two Phillips head, color matched toekick screws (in literature package).

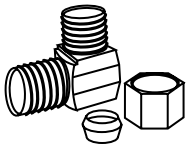

2 Wood Screws


2 Color Matched Toekick Screws

Screw Type Hose Clamp

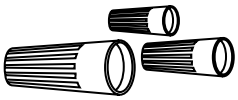
MATERIALS YOU WILL NEED:

- ☐ Ferrule, compression nut and 90° Elbow (3/8"NPT external thread on one end, opposite end sized to fit water supply)
- ☐ Thread seal tape
- ☐ UL Listed wire nuts (3)


90° Elbow, Ferrule and Compression Nut

Hand Shut-Off Valve

Thread Seal Tape

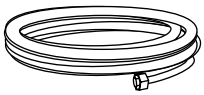

Wire Nuts (3)

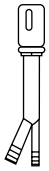
Materials for New Installations Only:

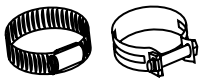
- ☐ Air gap for drain hose, if required
- ☐ Waste tee for house plumbing, if applicable
- ☐ Electrical cable or power cord, if applicable
- ☐ Screw type hose clamps
- ☐ Strain relief for electrical connection
- ☐ Hand shut-off valve
- ☐ Water line 3/8" min. copper
- ☐ Coupler for extending drain line, if applicable

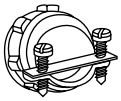
Waste Tee

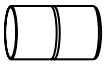
Electrical Cable (or Power Cord, if applicable)


Hot Water line


Air Gap


Screw Type Hose Clamps

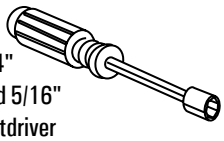

Strain Relief

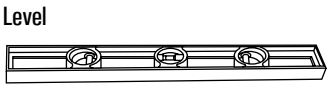

Coupler

TOOLS YOU WILL NEED:

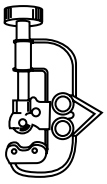
- ☐ Phillips head screwdriver
- ☐ 5/16" and 1/4" nutdriver
- ☐ 6" Adjustable wrench
- ☐ Level
- ☐ Carpenters square
- ☐ Measuring tape
- ☐ Safety glasses
- ☐ Flashlight
- ☐ Bucket to catch water when flushing the line
- ☐ Gloves

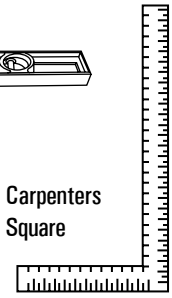
Phillips Head Screwdriver


1/4" and 5/16" Nutdriver

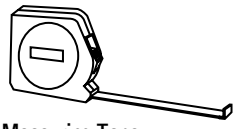

Level

6" Adjustable Wrench


Tubing Cutter


Carpenters Square

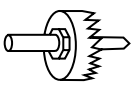
Flashlight

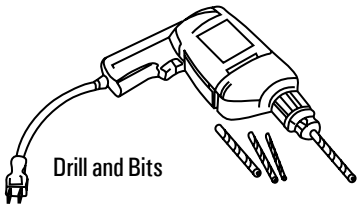

Measuring Tape

Bucket

Safety Glasses

Gloves


Hole Saw Set


Drill and Bits

For New Installations Only:

- ☐ Tubing cutter
- ☐ Drill and appropriate bits
- ☐ Hole saw set

Installation Preparation

PREPARE DISHWASHER ENCLOSURE

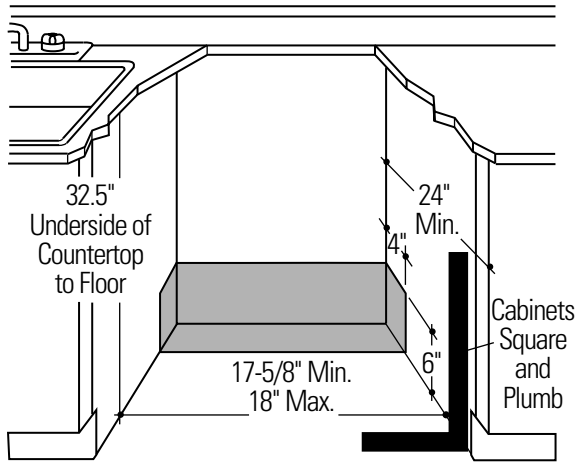


Figure A

Plumbing and Electric Service Must Enter Shaded Area

- The rough cabinet opening must be at least 24" deep and 17-5/8" to 18" wide. The opening should be 32.5" max. height.
- The dishwasher must be installed so that drain hose is no more than 10 feet in length for proper drainage.
- The dishwasher must be fully enclosed on the top, sides and back, and must not support any part of the enclosure.

CLEARANCES: When installed into a corner, allow 2" min. clearance between dishwasher and adjacent cabinet, wall or other appliances. Allow 25-5/8" min. clearance from the front of the dishwasher for door opening. Figure B

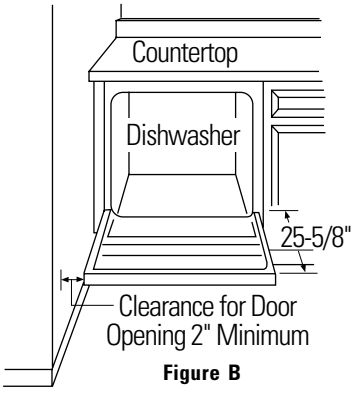


Figure B

Note: ADA installation, (32-1/2") beneath 34" high counter-tops may be accomplished by adjusting the toekick and leveling legs.

DRAIN REQUIREMENTS

- Follow local codes and ordinances.
- Do not exceed 10 feet distance to drain.
- Do not connect drain lines from other devices to the dishwasher drain hose.
- Dishwasher must be connected to waste line with an air gap (not supplied) or 32" minimum high drain loop, depending on local codes and ordinances to prevent back flow into the dishwasher.
- Air gap must be used if waste tee or disposer connection is less than 18" above the floor to prevent siphoning.

DRAIN PREPARATION

The type of drain installation depends on answers to the following questions:

☐ Do local codes or ordinances require an air gap?
☐ Will waste tee or disposer connection be less than 18" above the floor?
☐ Will installation have a drain loop less than 32" above floor?

If the answer to **ANY** of the 3 questions above is **YES, Method 1 MUST be used**. Otherwise either Method 1 or Method 2 may be used. Figure C or Figure D.

CAUTION:

An air gap MUST BE USED if the drain hose is connected to waste tee or disposer lower than 18" above the floor.

Failure to provide the proper drain connection height with air gap or 32" minimum, high drain loop will result in improper draining of the dishwasher.

Method 1 – Air Gap with Waste Tee or Disposer

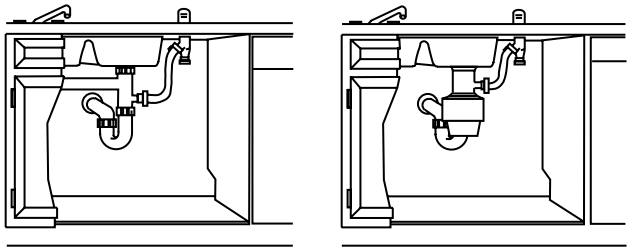


Figure C

Method 2 – High Drain with Waste Tee or Disposer

Provide a method to attach drain hose to underside of countertop.

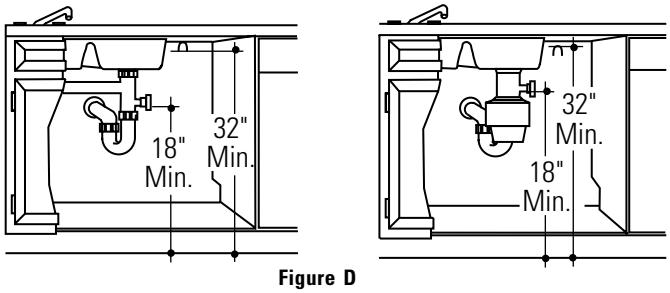


Figure D

Install waste tee or disposer and air gap according to manufacturer's instructions.

CABINET PREPARATION

- Drill a 1-1/2" dia. hole in the cabinet wall within the shaded areas shown in Figure A for the drain hose connection. The hole should be smooth with no sharp edges.

Installation Preparation

PREPARE ELECTRICAL WIRING

WARNING

FOR PERSONAL SAFETY: Remove house fuse or open circuit breaker before beginning installation. Do not use an extension cord or adapter plug with this appliance.

Electrical Requirements

- This appliance must be supplied with 120V, 60 Hz., and connected to an individual properly grounded branch circuit, protected by a 15 or 20 ampere circuit breaker or time delay fuse.
- Wiring must be 2 wire with ground.
- If the electrical supply does not meet the above requirements, call a licensed electrician before proceeding.

Grounding Instructions – Cable Direct

This appliance must be connected to a grounded metal, permanent wiring system, or an equipment grounding conductor must be run with the circuit conductors and be connected to the equipment grounding terminal or lead on the appliance.

Grounding Instructions – Power Cord Models

This appliance must be grounded. In the event of a malfunction or breakdown, grounding will reduce the risk of electrical shock by providing a path of least resistance for electric current. The plug must be plugged into an appropriate outlet that is installed and grounded in accordance with local codes and ordinances.

WARNING

The improper connection of the equipment grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service representative if you are in doubt that the appliance is properly grounded.

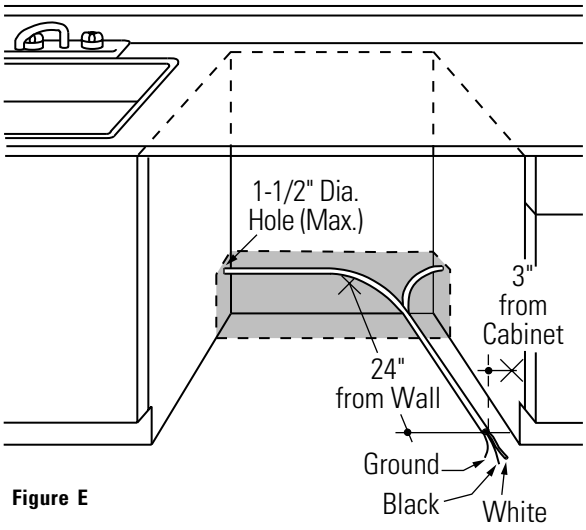


Figure E

Cabinet Preparation & Wire Routing

- The wiring may enter the opening from either side, rear or the floor within the shaded area.
- Cut a 1-1/2" max. dia. hole to admit the electrical cable. The hole must be free of sharp edges. If the cabinet wall is metal, the hole edge must be covered with a bushing.
- Cable direct connections may pass through the same hole as the drain hose and hot water line, if convenient. If cabinet wall is metal, the hole edge must be covered with a bushing.
  NOTE: Power cords with plug must pass through a separate hole.

Electrical Connection to Dishwasher

Electrical connection is on the right front of dishwasher.

- For cable direct connections the cable must be routed as shown in Figure E. Cable must extend a minimum of 24" from the rear wall.
- For power cord connections, install a 3-prong grounding type receptacle. The power-supply receptacle for the appliance shall be installed in a cabinet or on a wall adjacent to the undercounter space in which the appliance is to be installed.

PREPARE HOT WATER LINE

- The line may enter from either side, rear or floor within the shaded area shown in Figure F.
- The line may pass through the same hole as the electrical cable and drain hose. Or, cut an additional 1-1/2" dia. hole to accommodate the water line.
  If power cord with plug is used, water line must not pass through power cord hole.

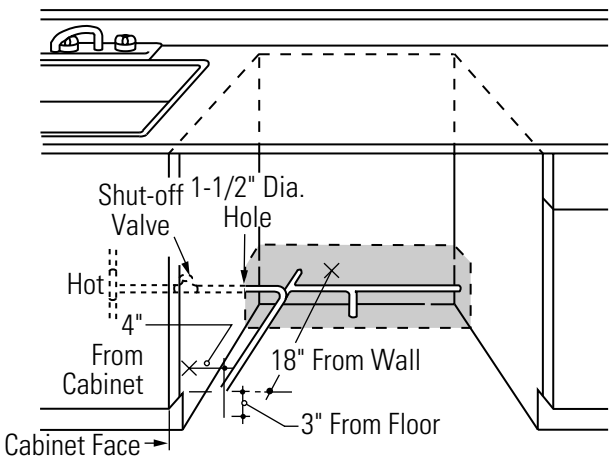


Figure F

Water Line Connection

- Turn off the water supply.
- Install a hand shut-off valve in an accessible location, such as under the sink. (Optional, but strongly recommended and may be required by local codes.)
- Water connection is on the left side of the dishwasher. Install the hot water inlet line, using no less than 3/8" O.D. copper tubing. Route the line as shown in Figure F and extend forward at least 18" from rear wall.
- Adjust water heater for 120°F to 150°F temperature.
- Flush water line to clean out debris.
- The hot water supply line pressure must be 20-120 PSI.

CAUTION:

Opening the door will cause the dishwasher to tip forward. **Do not open the door until you are ready to install the dishwasher.** If it is necessary to open the door, hold the top of the dishwasher securely with one hand and hold the door with the other hand.

BEFORE YOU BEGIN

Locate and set aside the package containing 2 Phillips head countertop mounting screws and 2 additional toekick screws (located in the literature package).

STEP 1 CHECK DOOR BALANCE

To check the door balance, hold the top of the dishwasher firmly.

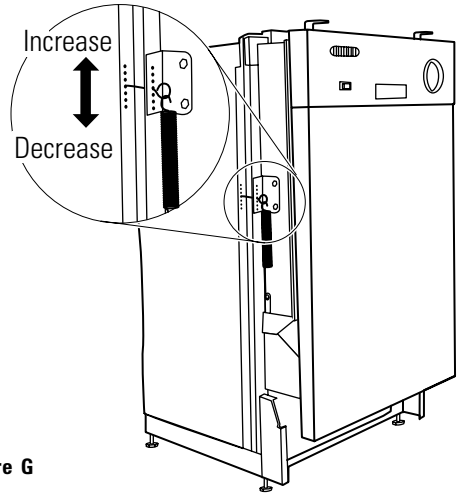


Figure G

- Open the door slowly, if the door drops when released, increase spring tension. If the door closes when released, decrease tension.
- Pull the spring adjustment pin out of the holes, insert in the next highest or lowest hole and test again.
- Adjust both door springs to the same tension.
- Continue moving the spring pin until door is balanced.

STEP 2 ADJUST LEVELING LEGS

- Move the dishwasher close to the installation location and lay it on its back.

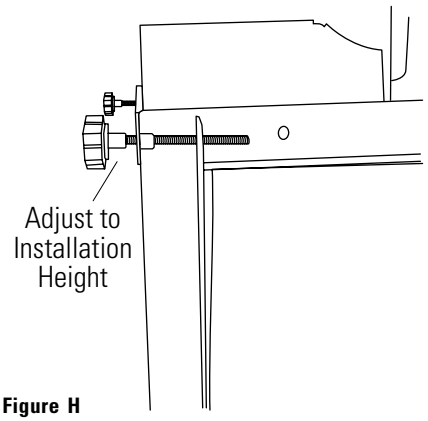


Figure H

- Measure installation height and dishwasher height. Extend leveling legs out from the dishwasher base, 1/4" less than installation height.

STEP 3 REMOVE TOEKICK

- Remove the 4 toekick screws. Lift off the 2 piece toekick.

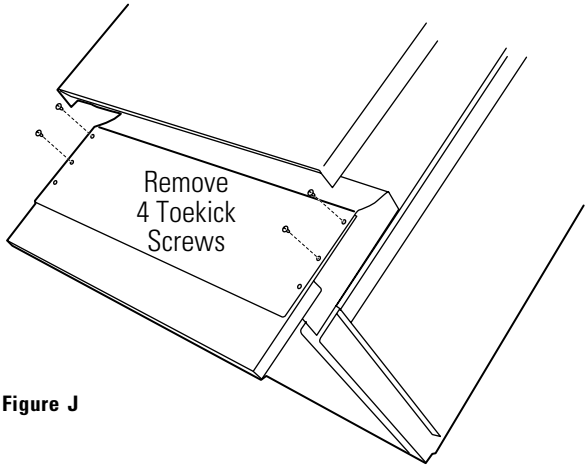


Figure J

STEP 4 INSTALL 90° ELBOW

- Wrap 90° elbow with thread seal tape.
- Install a 90° elbow onto the water valve.

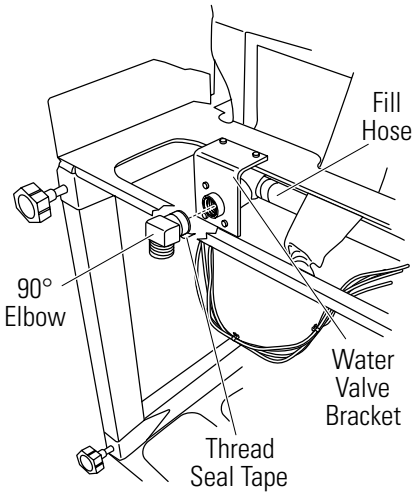


Figure L

- Do not over tighten 90° elbow, water valve bracket could bend or water valve fitting could break.
- Position the end of the elbow to face the rear of the dishwasher.

STEP 5 POSITION WATER LINE AND HOUSE WIRING

- Position water supply line and house wiring on the floor of the opening to avoid interference with base of dishwasher and components under dishwasher.

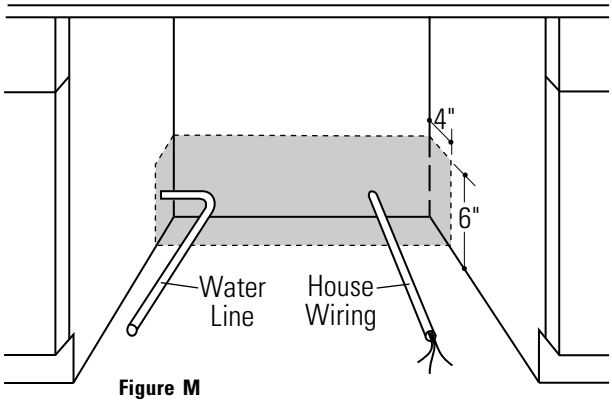


Figure M

STEP 6 INSERT DRAIN HOSE THROUGH CABINET

- Insert drain hose into cabinet wall hole. If a power cord is used, guide the end through a separate hole.

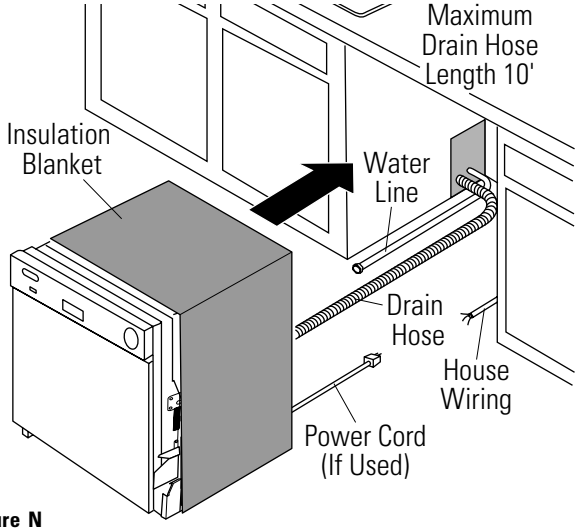


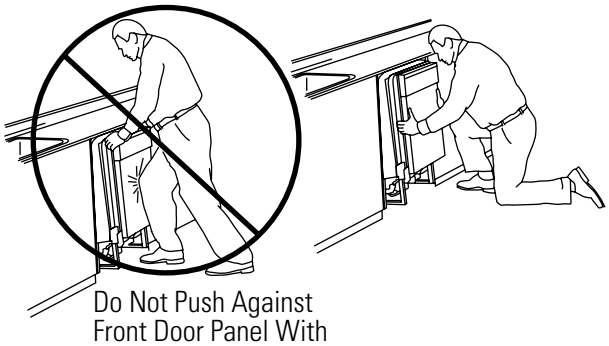
Figure N

TIP: Position water line and house wiring on the floor to avoid interference with base of dishwasher.

STEP 7 SLIDE DISHWASHER PARTIALLY INTO CABINET

DO NOT PUSH AGAINST FRONT PANEL WITH KNEES. DAMAGE WILL OCCUR.

- Slide dishwasher into the opening a few inches at a time.



Do Not Push Against Front Door Panel With Knee. Damage to The Door Panel Will Occur.

Figure O

- As you proceed, pull the drain hose through the opening under the sink. Stop pushing when the dishwasher is a few inches forward of adjacent cabinetry.
- Make sure drain hose is not kinked under the dishwasher and there is no interference with the water line and wiring or any other component.

STEP 8 POSITION DISHWASHER UNDER COUNTERTOP

- Check to be sure that wires are secure under the dishwasher and not pinched or in contact with door springs or other dishwasher components.

TIP: Check tub insulation blanket, if equipped. It should be positioned so it is not bunched up or interfering with door springs. Check by opening and closing the door.

- Push dishwasher into cabinet. The front corners of the dishwasher door should be flush with cabinet doors. Be careful not to dent front panels with knees or damage countertop or cabinets with dishwasher parts.

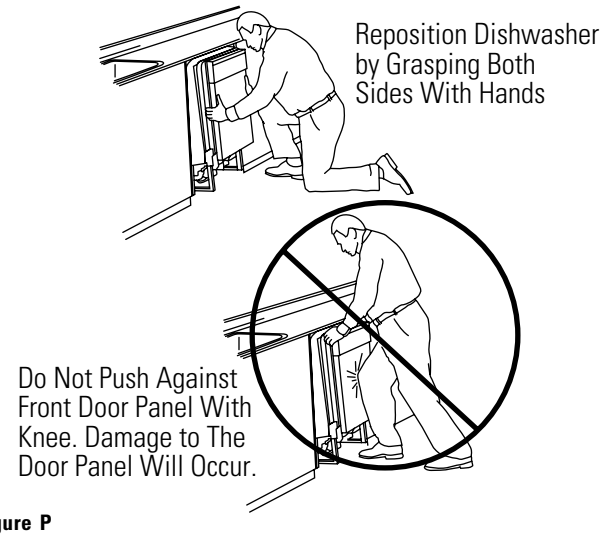

Reposition Dishwasher by Grasping Both Sides With Hands
Do Not Push Against Front Door Panel With Knee. Damage to The Door Panel Will Occur.

Figure P

STEP 9 LEVEL DISHWASHER

IMPORTANT – Dishwasher must be level for proper dish rack operation and wash performance.

- Place level on door and rack track inside the tub as shown to check that the dishwasher is level.

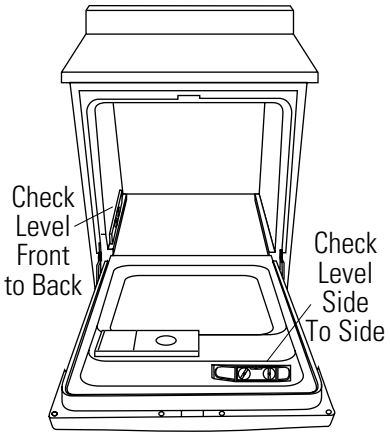


Figure Q

- Level the dishwasher by adjusting the four leveling legs individually.

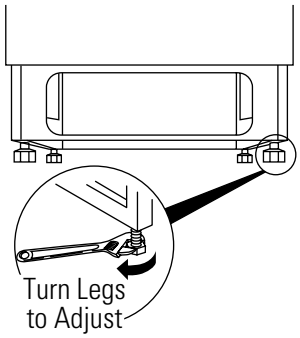


Figure R

TIP: Pull lower rack out, about halfway. Check to be sure the rack does not roll forward or back into dishwasher. If the rack rolls in either direction, the dishwasher must be leveled again.

- If door hits the tub, the dishwasher is not installed correctly. Adjust leveling legs to align door to tub.

STEP 10 SECURE DISHWASHER TO CABINET

The dishwasher must be secured to the countertop.

- Position the dishwasher so that the tub flange aligns with the front face of the cabinet frame.

IMPORTANT: Check to be sure the dishwasher is centered in the opening and there is no interference with adjacent cabinets when opening or closing the door.

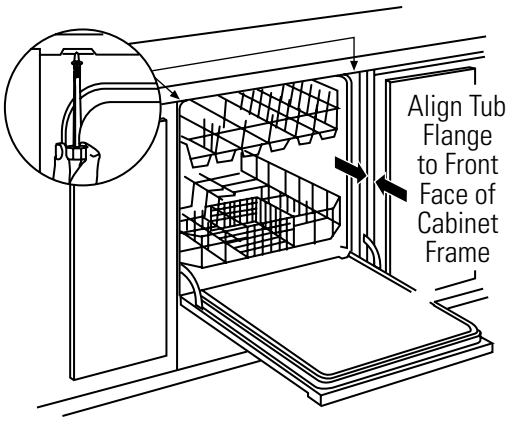


Figure S

- Fasten the dishwasher to the underside of the countertop with the 2 Phillips screws provided.

IMPORTANT – Drive screws straight and flush. Protruding screw heads will scratch the top of the control panel and can interfere with door closing.

STEP 11 CONNECT WATER SUPPLY

Connect water supply to 90° elbow.

- Slide compression nut, then ferrule over end of water line.
- Insert water line into 90° elbow.
- Slide ferrule against elbow and secure with compression nut.

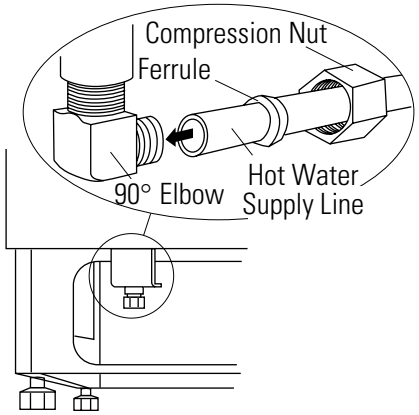


Figure T

IMPORTANT – Check to be sure that door spring does not rub or contact the fill hose or water supply line. Test by opening and closing the door. Re-route the lines if a rubbing noise or interference occurs.

STEP 12 CONNECT DRAIN LINE

FOLLOW ALL LOCAL CODES AND ORDINANCES.

The drain hose molded end will fit 5/8", 3/4" or 1" diameter connections on the air gap, waste tee or disposer. Cut on the marked line as required for your installation.

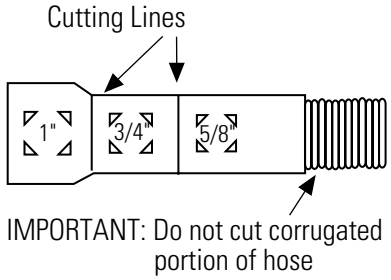


Figure U

- If a longer drain hose is required, add up to 42" of length for a total of 10 ft. to the factory installed hose. Use 5/8" or 7/8" inside diameter hose and a coupler to connect the two hose ends. Secure the connection with hose clamps.

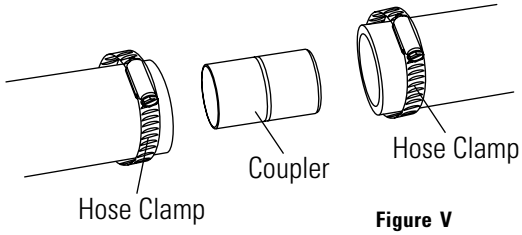


Figure V

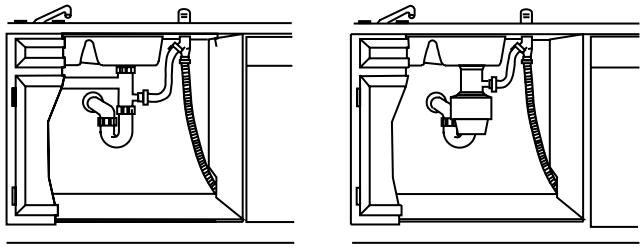
- Secure the drain hose to the air gap, waste tee or disposer with clamps.

NOTE: TOTAL DRAIN HOSE LENGTH MUST NOT EXCEED 10 FEET FOR PROPER DRAIN OPERATION.

DRAIN LINE INSTALLATION

- Connect drain line to air gap, waste tee or disposer using either previously determined method.

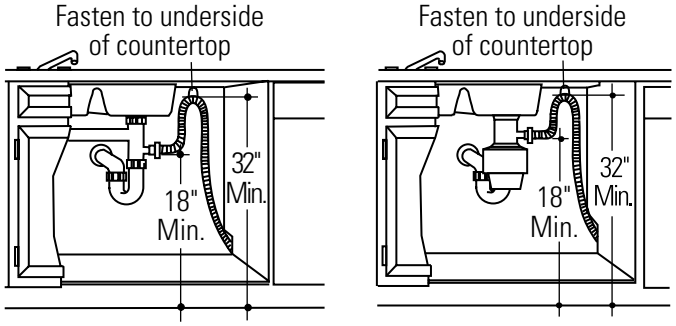
Method 1 – Air gap with waste tee or disposer



Waste Tee Installation | Disposer Installation

Figure W

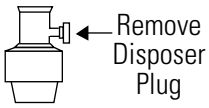
Method 2 – High drain loop with waste tee or disposer



Waste Tee Installation | Disposer Installation

Figure X

IMPORTANT –



When connecting drain line to disposer, check to be sure that drain plug has been removed. DISHWASHER WILL NOT DRAIN IF PLUG IS LEFT IN PLACE.

TIP: Avoid unnecessary service call charges. Always be sure disposer drain plug has been removed before attaching dishwasher drain hose to the disposer.

STEP 13 CONNECT POWER SUPPLY

Skip this step if equipped with power cord.
Verify that power is turned off at the source.

- Remove junction box cover "A".
- Locate the three dishwasher wires, (white, black and green) with stripped ends. Insert dishwasher wires through the small hole in the junction box "B".
- Secure house wiring to the bottom of the junction box with a strain relief "C".
- User wire nuts to connect incoming ground to green, white to white and black to black "D".
- Replace junction box cover "E". Check to be sure that wires are not pinched under the cover.

E. Replace Junction Box Cover

WARNING

If house wiring is not 2-wire with ground, a ground must be provided by the installer. When house wiring is aluminum, be sure to use UL Listed anti-oxidant compound and aluminum-to-copper connectors.

STEP 14 PRE-TEST CHECKLIST

Review this list after installing your dishwasher to avoid charges for a service call that is not covered by your warranty.

☐ Check to be sure power is OFF.

☐ Open door and remove all foam and paper packaging.

☐ Locate the Owner's Manual in the literature package.

☐ Read the Owner's Manual for operating instructions.

☐ Check door opening and closing. If door does not open and close freely or tends to fall, check spring adjustments. See Step 1.

☐ Check to be sure that wiring is secure under the dishwasher, not pinched or in contact with door springs or other components. See Step 9.

☐ Check door alignment with tub. If door hits tub, level dishwasher. See Step 10.

☐ Pull lower rack out, about half way. Check to be sure it does not roll back or forward on the door. If the rack moves, adjust leveling legs. See Step 10.

☐ Check door alignment with cabinet. If door hits cabinet, reposition or relevel dishwasher. See Step 10.

☐ Verify water supply and drain lines are not kinked or in contact with other components. Contact with motor or dishwasher frame could cause noise. See Step 8.

☐ Turn on the sink hot water faucet and verify water temperature. Incoming water temperature must be between 120°F and 150°F. A minimum of 120°F temperature is required for best wash performance. See "Prepare Hot Water Line", page 5.

☐ Add 2 quarts of water to the bottom of the dishwasher to lubricate the pump seal.

☐ Turn on water supply. Check for leaks. Tighten connections if needed.

☐ Remove protective film if present from the control panel and door.

STEP 15 DISHWASHER WET TEST

- ☐ Turn on power supply (or plug power cord into outlet, if equipped).
- ☐ Turn dial to Normal "Wash" position.
- ☐ Close door.
- ☐ Check to be sure that water enters the dishwasher. If water does not enter the dishwasher, check to be sure that water and power are turned on.
- ☐ Check for leaks under the dishwasher. If a leak is found, turn power supply off, then tighten connections. Restore power after leak is corrected.
- ☐ Check for leaks around the door. A leak around the door could be caused by door rubbing or hitting against adjacent cabinetry. Reposition the dishwasher if necessary. See Step 9.
- ☐ The dishwasher will drain and turn off about 5 to 7 minutes after the first fill. Check drain lines. If leaks are found, turn power off at the breaker and correct plumbing as necessary. Restore power after corrections are made. See Step 12.
- ☐ Open dishwasher door and make sure most of the water has drained. If not, check that disposer plug has been removed and/or air gap is not plugged. See Step 13. Also check drain line for kinking.
- ☐ Run the dishwasher through another fill and drain cycle. Check for leaks and correct if required.
- ☐ At the end of drain, open door and turn dial to OFF position.

STEP 16 REPLACE TOEKICK

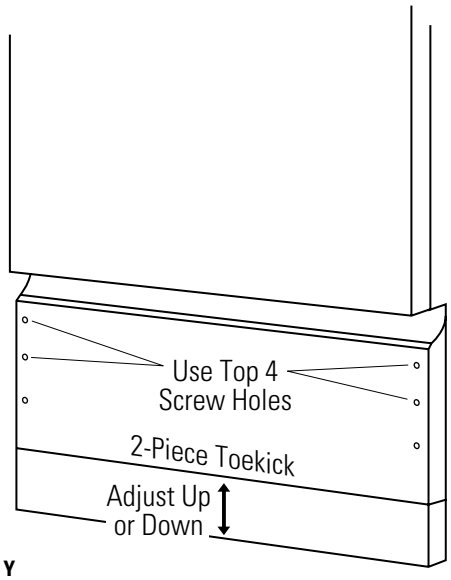


Figure Y

- Place 2-piece toekick against the legs of the dishwasher.
- Place the inner toekick piece (with slots) against the toekick bracket. The slots should align with toekick bracket screw holes. Allow the toekick to touch the floor.
- Place larger toekick over the inner piece and install 4 toekick screws.
- Use additional 2 screws that are provided for installations over 33-1/2" high.
- Use both toekick pieces for all installation heights.

STEP 17 LITERATURE

Be sure to leave complete literature package and installation instructions with consumer.